

NARRATIVE REPORT

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE REFUGE

Lansing District

July - June

FY-74

United States Department of the Interior

Fish and Wildlife Service

Bureau of Sport Fisheries and Wildlife

Box 128

Lansing, Iowa 52151

I. General

A. Weather Conditions

Temperatures averaged near normal for most of the year. October averaged above normal, delaying the first frost until early November, a month later than usual. Precipitation averaged near normal until April 1. Heavy rains during April, May, and June pushed the yearly total to 36.25 inches--4.69 inches above normal. Snowfall totaled 24 inches--4 inches below normal. Deepest snow accumulation was 7 inches in early February, compared to 15 inches in April of FY-73.

On October 3, at 7:30 in the evening a severe wind and hail storm struck the pool, cutting a two mile wide swath across the river north of Lansing, Iowa. The storm appeared to reach its maximum force while over the refuge, piling golf ball sized hail four inches deep on the marsh. Winds of over hurricane force broke off or uprooted hundreds of trees. Hail damage to the marsh was severe. All emergent vegetation was shredded to the water level. Nearly 4,000 acres of marsh, or 25% of the Iowa portion of the pool was leveled. Wildlife mortality was high, probably because the storm struck after dark. Hunters and fishermen reported finding hundreds of dead, dying, or blinded ducks in the area. Hunters reported that some of the ducks taken weeks later in the area had their back, head and neck areas so badly bruised and infected that they had to be discarded. The loss probably exceeded 1,000 ducks.

B. Habitat Conditions

1. Water

The pool level remained slightly above normal (normal: 20.00') until mid-March, when it began to rise steadily due to spring runoff. The highest level reached was 23.48' on April 20. Heavy late spring rains caused a still higher rise on June 21, peaking at 24.52 feet. This second peak was still nearly 4 feet below the 1973 level. By June 30 the pool had returned to near normal. Warm temperatures during November and early December delayed freezeup until late December.

2. Food and Cover

Near normal water levels in the middle and lower portion of the pool during the summer and fall months caused a complete recovery of the aquatic vegetation killed by the 1972 floods. All American lotus and sagittaria beds had regrown by the end of the year. Low water levels in the upper area of the pool caused large mud flats for excellent smartweed growth. Overall, waterfowl food supplies and availability were excellent.

Deer, upland game and furbearers had good to excellent food and cover conditions. Normal water levels allowed all resident species to remain on the bottoms year round, with no extremely high water to drive them to the surrounding uplands.

II. Wildlife

A. Migratory Birds

1. Waterfowl

Ducks: The summer breeding population consisted of 500 mallards, 10 blacks, 400 blue-winged teal, 2,200 wood ducks, and 200 hooded mergansers. This was an increase of 50 blue-winged teal and 150 hooded mergansers over the FY-73 breeding population. Estimated production was 1,000 mallards, 20 blacks, 700 blue-winged teal, 6,100 wood ducks, and 400 hooded mergansers. This was an increase of 100 mallards, 10 blacks, 100 blue-winged teal and 300 hooded mergansers over FY-73. Wood ducks decreased by 130.

Fall migrating blue-winged teal and American widgeon first arrived during the week ending August 12, the same week as in FY-73. The Fall migration peaked at 64,650 on the week ending October 6. The FY-73 peak occurred on the week ending November 11, and totaled 73,900 ducks. By years end the duck population was down to 40 mallards. Total days use for the September-December period was 3,460,030, an 11% decrease from the 3,847,900 days use recorded in FY-73. Total days use for the year was 5,925,290, a 3% decrease from the 6,120,170 recorded in FY-73.

From the first of January until mid-March, the district duck population consisted of the usual winter compliment of 40 mallards. In later March, blacks, wood ducks, mergansers, ring-necks and pintails began to arrive. The peak population of 44,500 ducks occurred the week ending April 20, the same week as last year's peak of 66,197 ducks. Duck numbers then decreased sharply to breeding population of 4,110 the week ending June 8. Total duck days use for the January-April period was 1,735,090 a 33% increase from the FY-73 total of 1,303,440.

Geese: The first fall migrating geese were seen the week ending September 15 and the last were observed the week ending November 10. The peak population was 300 Canadas during the week ending October 6. One hundred snow geese were observed in the district the week ending October 6. The peak population during the fall of FY-73 was 94 geese and was comprised of 90 Canadas and 4 snow geese on October 7. Total days use for FY-73 was 19,530, a 425% increase from FY-73 total of 3,720 use days. The first Spring migrating Canada geese arrived the week ending March 9. The peak population of 500 was 415 above the spring FY-73 level. No snow geese were observed during the spring migration. All geese were gone by April 27.

Swans: The fall peak of whistling swans totaled 300 birds compared to 183 in FY-73. Spring use peaked at 100 birds during the week ending April 20, compared to a peak of 116 during the spring of FY-73. Total days use was 4,650, a 25% increase from the 3,710 use days recorded in FY-73.

Coots and Gallinule: Coot peaked at 40,000 during the fall and 9,000 during the spring. The FY-73 peaks were 58,700 and 7,900 respectively. The breeding population of coot was 400 and production was 400. Total days use for coot was 1,320,200, a 39% decrease from the FY-73 total of 2,151,380. Gallinules peaked at 500 during the fall and 150 during the spring. The FY-73 peaks were 250 and 60 respectively. The breeding population was 500 and production was 200. Total days use for gallinule was 35,200 exactly the same as the FY-73 totaled.

2. Other Water Birds

Egrets: Migrating great egrets were last observed the week ending November 11 and were first observed the week ending April 16. Peak populations were 800 during the fall and 400 during the spring. In October of 1971, all nest trees in the egret-heron rookery were marked and all of the nests were recorded. Each June 20% of the nests are surveyed to obtain a production estimate. Egret production totaled 500 birds, up 75 from the FY-73 estimate.

Fourteen cattle egrets were observed near the Genoa rookery and near New Albin at the Bakewell pond.

Grebes: Nothing to report.

Heros and Bitterns: The great blue heron fall population peaked at 2600 on August 20 and the spring population peaked at 1200 on May 8. Production, using a 20% sample of the worked rookery trees was 1300 birds, up 170 from the FY-73 estimate. Green, black and yellow-crowned night herons, plus American and least bitterns were present in small numbers and nested in the district.

Cormorants, Loons, Gulls, Terns and Others: Nothing to report.

3. Shorebirds

Nothing to report.

4. Doves

Nothing to report.

B. Upland Game Birds

Wild turkey: In early September, 58 wild turkeys were observed crossing Rt. 26 at Crooked Creek near Reno, Minnesota. The birds came off the bluffs and headed into the refuge bottoms. Over half the birds appeared to be young of the year. A second flock of about 15 birds has also been seen in the area.

C. Big Game Animals

White-tailed deer: Lack of high water allowed the deer herd to remain on the refuge the entire year during FY-73. A peak population of 50 animals occurred during December after the Minnesota and Iowa hunting seasons. The refuge offered good browse and cover for the wintering population.

D. Fur Animals, Predators, Rodents and Other Mammals

Muskrats: The muskrat population is determined from house counts on 16 survey areas throughout the district. There were 1,055 houses counted in FY-74 compared to 1,106 in FY-73. Although trapping pressure has been very heavy over the last two years, the muskrat population appears to be holding its own.

Beaver: The beaver population is calculated from the number of active lodges which are counted on three different transect routes. There were 43 active lodges in FY-74 compared to 50 in FY-73 and 42 in FY-72. Heavy beaver trapping during FY-73 in Iowa and Wisconsin greatly reduced the population, resulting in a shorter season in Iowa and a closed season in Wisconsin during FY-74. The Reno bottoms population continues high with only 100 beaver trapped during the FY-74 season. During low summer water levels, beaver flowages provide almost all of the water area needed for brood rearing in the Reno bottoms.

Red Fox: The red population remains low due to a mange epidemic.

E. Hawks, Eagles, Owls and Crows

Hawks, Owls, Crows: Nothing to report.

Bald Eagle: Eagle numbers continue to increase with a fall peak of 100 and a spring peak of 150 birds estimated, compared to 92 and 30 during FY-73. On December 4, bald eagles, numbering 45, were attracted at New Albin landing by dead fish left by commercial fishermen. Only 8 of these birds were adults.

The pair of bald eagles that nest in the Reno bottoms raised two young in FY-74, after not bringing off any young in FY-73. Total young since the nest was discovered in 1969 stands at 8 eaglets. None of these young birds have returned to nest in the area so far.

Vultures: Turkey vultures nest on the bluffs on both sides of the refuge. For the past two years these birds have been observed feeding on the dead fish dropped by the herons and egrets at the Genoa rookery. Up to 20 vultures were observed feeding at the rookery throughout May and June. Peak numbers totaled 40 birds during the summer.

G. Fish

Summer and fall sport fishing was the best in 5 years with large catches of bullheads, bass, bluegills and croppie common, especially in the upper end of the pool. Ice fishing was only fair to poor due to warm weather and poor ice conditions. Walleye fishing was good all year long below the Genoa dam and around wing dams. Commercial fishermen made excellent catches in the Iowa portion of the pool with up to 80,000 lbs. of carp taken in one haul.

H. Reptiles and Amphibians

Nothing to report.

I. Disease

None.

J. Rare and Endangered Species

Ospreys are reported in Section E. Hawks, Eagles, Owls, and Crows are on the preceding page.

III. Refuge Development and Maintenance

A. Physical Development and Maintenance

No major physical development was done on the Lansing District during FY-74.

All equipment and building maintenance was carried out with the help of two N.Y.C. students. Vehicles and boats were washed regularly and the workshop was kept neat and orderly.

Boat landing and sandbars were cleaned several times and posted with litter signs.

Three cannon-net sites were prepared for wood duck banding.

Five dead elm trees at New Albin landing were cut and burned.

B. Planting through F. Fires

Nothing to report.

IV. Resource Management

A. Grazing and B. Haying

None

C. Fur Harvest

Fur Catch FY-74

<u>Species</u>	<u>No Reports</u>	<u>Catch</u>	<u>Value</u>	<u>Pelt Averages</u>
Muskrats	187	33,391	\$84,752.42	\$ 2.54
Mink	25	31	527.00	17.00
Beaver	24	412	3,387.00	8.22
Raccoon	19	105	1,338.00	12.74
Opossum	2	11	12.00	1.09

One hundred and ninety trappers bought permits in this district during the FY-74 season. This was 51 more than the FY-73 season. This increase is trappers was directly related to the increase in fur prices. Trapping conditions were good to excellent. The total muskrat catch increased from 27,757 reported in FY-73 to 33,391 reported in FY-74. Prices increased from \$2.27 per pelt in FY-73 to \$2.54 per pelt in FY-74.

A beaver season was not allowed in the Wisconsin portion of the pool. The Minnesota portion was opened for the first time since FY-71, but only 100 beaver were taken due to low prices and lack of interest. A five month long season in the Iowa portion of the district saw 312 beaver harvested, over half the estimated population. A much shorter season was recommended for the FY-75 season. The season bag limit of beaver on the refuge is 10 in Minnesota, 10 in Wisconsin, and no limit in Iowa.

D. Timber Removal

None

E. Commercial Fishing

Commercial fishing was good through most of FY-74. Good catches of catfish and bullhead were made throughout the summer. Late fall seining brought in excellent catches of sheepshead, upwards of 80,000 lbs. per haul. Stable water levels and good ice provided excellent conditions for seine hauls in December and January for buffalo and carp.

F. There are 47 special use permits in effect in the district covering houseboats, boathouses, boatdocks, and commercial fishing bases on Bureau and Corps of Engineers land. All structures are inspected yearly. There are also 12 other permits covering access areas, cabin sites, barge moorage, power line right-of-way, boat livery and fish floats.

V. Field Investigation or Applied Research

A. Wood Duck Nesting Cylinders and Modified Cavities

Two of the nine metal nesting cylinders were used by wood ducks in FY-74 compared to 4 in FY-73. Both nests were successful. The other cylinders were used by squirrels, grackles and wasps.

B. Wood Duck Banding

Wood Duck banding was done entirely with the cannon-net during FY-74. Three cannon-net sites were cleared of brush and grass for permanent locations. Seven shots were made capturing 253 birds. The wood ducks banded included:

	AHY	HY	Local	Total
Male	16	129	9	154
Female	7 23	87 216	5 14	99 253

C. Wood Duck Flight Counts

Spring flight counts have been conducted at three different stations since FY-63 to determine the district wood duck breeding population. The counts are conducted from the middle of April through the first week in May. The breeding population for FY-74 was calculated at 2,366, a 9% increase over last year's 2,170 total. Numbers of wood ducks counted at stations were:

	FY-63	FY-71	FY-72	FY-73	FY-74
Crooked Creek	84	90	92	90	104
Village Creek	26	42	174	172	170
Wexford Creek	50	54	76	72	90

D. Waterford Hunter Bag Checks

The average daily bag limit of ducks during FY-74 was 2.34 compared to 1.36 in FY-73. The average daily bag on opening weekend was 2.36 compared to 1.72 in FY-73. Blue-winged teal ranked number 1 in the bag, increasing from 20.50% in FY-73 to 36.52% in FY-74. Mallards decreased from 36.83% in FY-73 to only 24.18% in FY-74. Green-winged teal increased in the bag from 4.61% in FY-73 to 6.29% in FY-74. All other species remained fairly constant.

VI. Public Relations

A. Recreational Use

Day Use Comparisons

<u>Year</u>	<u>Fishing</u>	<u>Misc.</u>	<u>Ducks</u>	<u>Deer</u>	<u>Other</u>	<u>Total</u>
FY-73	139,700	94,800	14,380	380	250	249,510
FY-74	118,200	70,450	11,250	540	290	200,730

Hunting and fishing use is determined from periodic ear counts at all landings, with sample area counts between the total counts. Miscellaneous use (swimming, boating, skiing, etc.) is determined from monthly total head counts and weekly sample area counts. Fishing visits fell below the FY-73 level even though fishing overall was excellent this year. The gasoline squeeze may account for part of the decrease. Miscellaneous use was down due to the cold, rainy fall weather.

C. Refuge Participation

The district manager presented 10 programs to 860 students during National Wildlife Week. Two films were shown to 48 members of the New Albin Community Club. Eleven news releases were issued.

D. Hunting

Big Game: Deer hunting activity increased on the refuge again this year, primarily due to the higher deer population. Minnesota hunters took an estimated 10 deer from the Reno bottoms area of the district. Iowa hunters harvested an estimated 5 deer during their 5 day shotgun season, and 3 more during the bow season. Wisconsin hunters harvested an estimated 2 deer.

Upland Game: Very few rabbits, squirrels, or grouse are bagged on the refuge. Those that are taken are usually taken incidental to waterfowl hunting. Higher fur prices turned out more raccoon hunters, with an estimated 50 raccoon taken on the refuge with the aid of dogs.

Waterfowl: Total hunting activity decreased 22% over FY-73, probably due to the Monday openings in Wisconsin and Minnesota.

The waterfowl season was rated as fair to poor in Wisconsin and Iowa, and good in Minnesota. Minnesota chose a split season, opening at Noon on Monday, October 1 and closing October 10. The second half of the season ran from October 20 through November 18. Large numbers of wood ducks and teal in the Reno bottoms allowed most hunters to limit out on the opening day. A 4:00 P.M. closing time allowed many ducks to move back into the area for evening feeding, holding ducks in the bottoms throughout the season.

Iowa chose the point system, running their season from October 6 through October 10 and October 13 through November 19. Most ducks left the Iowa portion of the pool after opening day and hunting remained poor throughout the season.

Wisconsin chose the point system for the first time, and ran their season from October 1 through October 7 and October 13 through November 19. Wisconsin also had a sunrise opening for the first time and hardly anybody waited. Most hunters started shooting at least 30 minutes early and state and federal conservation officers made many cases. Sky-busting was common and few ducks were taken until later in the season.

E. Violations

Eleven violators were apprehended in the district by refuge personnel, compared to only 2 during the FY-73 season. Most were hunting violations for early shooting during the Wisconsin season. State wardens also had a good year in the district.

F. Safety

All safety literature was reviewed as it was received and the refuge staff meetings included safety discussions and films. District personnel recorded no accidents during FY-74 and no visitor fatalities occurred.

VII. Other Items

A. Items of Interest

Nothing to report.

Name

Douglas M. Mullen

Personnel Title

District Refuge Manager

Submitted By:

Douglas M. Mullen

Signature

District Manager

Title

February 19, 1975

Date

DISTRICT: Lansing

MONTH: July

F.Y. 74

	DAYS USE FOR PERIOD	7/7	Week ending: 7/14	7/21	7/28		MONTHLY TOTAL	
								AVERAGE
WATERFOWL POPULATIONS								
COOT	5600	200	200	200	200		800	200
SWAN								
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	14000	500	500	500	500		2000	500
BLACK	280	10	10	10	10		40	10
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL								
B.W. TEAL	11200	400	400	400	400		1600	400
SHOVELER								
WOOD DUCK	61600	2200	2200	2200	2200		8800	2200
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE								
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER								
RED BR. MERGANSER								
HOODED MERGANSER	5600	200	200	200	200		800	200
TOTAL DUCKS	92680	3310	3310	3310	3310		13240	3310

DISTRICT: Lansing

MONTH: August

F.Y. 74

	DAYS USE FOR PERIOD	Week ending: 8/4	8/11	8/18	8/25	9/1	MONTHLY TOTAL	AVVERAGE
WATERFOWL POPULATIONS								
COOT	15400	200	200	400	600	800	2200	440
SWAN								
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	31500	500	500	500	1000	2000	4500	900
BLACK	2800	10	40	50	100	200	400	80
GADWALL								
WIDGEON	10570							
PINTAIL	1820							
G.W. TEAL	4270							
B.W. TEAL	76300	400	500	2000	3000	5000	10900	2180
SHOVELER	1120							
WOOD DUCK	115500	2200	2200	3100	4000	5000	16500	3300
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE								
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER								
RED BR. MERGANSER								
HOODED MERGANSER	9800	200	200	300	500	1400	280	
TOTAL DUCKS	253680	3310	3440	5890	9100	14500	36240	7248

DISTRICT: Lansing

MONTH: September

F.Y. 74

	DAYS USE FOR PERIOD	Week ending: 9/8	9/15	9/22	9/29		MONTHLY TOTAL	MONTHLY TOTAL	AVERAGE
WATERFOWL POPULATIONS									
COOT	154000	1000	5000	6000	10000		22000	22000	5500
SWAN									
CANADA GOOSE	560	10	20	50			80	80	20
WHITE FRONT									
SNOW/BLUE									
OTHER									
TOTAL GEESE	560	10	20	50			80	80	20
MALLARD	147000	4000	5000	6000	6000		21000	21000	5250
BLACK	21700	500	800	900	900		3100	3100	775
GADWALL	7000	100	200	300	400		1000	1000	250
WIDGEON	266000	2000	8000	10000	18000		38000	38000	9500
PINTAIL	18200	300	500	800	1000		2600	2600	650
G.W. TEAL	46900	700	1000	2000	3000		6700	6700	1675
B.W. TEAL	189000	6000	6000	7000	8000		27000	27000	6750
SHOVELER	7000	200	200	300	300		1000	1000	250
WOOD DUCK	280000	8000	10000	10000	12000		40000	40000	10000
REDHEAD									
CANVASBACK									
RING-NECK									
SCAUP	1120	10	50	100			160	160	40
GOLDENEYE									
BUFFLEHEAD									
RUDDY	280						40	40	10
OLD SQUAW									
SCOTER									
COMMON MERGANSER									
RED BR. MERGANSER									
HOODED MERGANSER	13300	600	700	300	300		1900	1900	475
TOTAL DUCKS	997500	22400	32410	37650	50040		142500	142500	35625

DISTRICT: Lansing

MONTH: October F.Y. 74

	WATERFOWL POPULATIONS	DAY'S USE FOR PERIOD ::	Week ending: 10/6	10/13	10/20	10/27	11/3	MONTHLY TOTAL	AVERAGE
COOT	861000	40000	30000	20000	18000	15000	123000	24600	
SWAN	175				5	20		25	5
CANADA GOOSE	7000	300	100	200	200	200	1000	200	
WHITE FRONT	2100	100	50	50	50	50	300	60	
SNOW/BLUE									
OTHER									
TOTAL GEESE	9100	400	150	250	250	250	1300	260	
MALLARD	329000	12000	10000	10000	10000	5000	47000	9400	
BLACK	45500	1000	2000	2000	1000	500	6500	1300	
GADWALL	14000	400	400	400	400	400	2000	400	
WIDGEON	630000	25000	30000	20000	10000	5000	90000	18000	
PINTAIL	21000	1000	500	500	500	500	3000	600	
G.W. TEAL	49000	4000	1000	1000	1000	500	7000	1400	
B.W. TEAL	58800	5000	2000	1000	200	200	8400	1680	
SHOVELER	4900	300	100	100	100	100	700	140	
WOOD DUCK	287000	15000	10000	10000	5000	1000	41000	8200	
REDHEAD	25900	100	100	2000	1000	500	3700	740	
CANVASBACK	18900	100	100	1000	1000	500	2700	540	
RING-NECK	32200	100	100	500	1000	3000	4600	920	
SCAUP	255500	500	1000	10000	15000	10000	36500	7300	
GOLDENEYE	4900				200	500	700	140	
BUFFLEHEAD	4200				100	500	600	120	
RUDDY	1750	50	50	50	50	50	250	50	
OLD SQUAW									
SCOTER									
COMMON MERGANSER									
RED BR. MERGANSER	350						50	10	
HOODED MERGANSER	3850	200	200	100	50	--	550	110	
TOTAL DUCKS	1786750	64650	57550	58650	46100	28300	255250	51050	

DISTRICT: Lansing

MONTH: November F.Y. 74

	WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	11/10	11/17	11/24	12/1		MONTHLY TOTAL	
	COOT	14000	500	500	500	500		2000	500
	SWAN	2870	10	50	300	50		410	102
	CANADA GOOSE	700	100	--	--	--		100	25
	WHITE FRONT	70	10	--	--	--			
	SNOW/BLUE	70	10	--	--	--		10	2
	OTHER			--	--	--			
	TOTAL GEESE	770	110	--	--	--		110	27
	MALLARD	98000	5000	5000	2000	2000		14000	3500
	BLACK	8400	500	500	100	100		1200	300
	GADWALL	70	10	--	--	--		10	2
	WIDGEON	4200	500	100	--	--		600	150
	PINTAIL	2800	50	50	200	100		400	100
	G.W. TEAL	350	50	--	--	--		50	12
	B.W. TEAL	350	50	--	--	--		50	12
	SHOVELER	70	10	--	--	--		10	2
	WOOD DUCK	14700	1000	500	500	100		2100	525
	REDHEAD	4340	10	10	500	100		620	155
	CANVASBACK	35700	100	1000	3000	1000		5100	1275
	RING-NECK	175000	5000	10000	5000	5000		25000	6250
	SCAUP	175000	5000	10000	5000	5000		25000	6250
	GOLDENEYE	56000	1000	5000	1000	1000		8000	2000
	BUFFLEHEAD	14000	500	500	500	500		2000	500
	RUDDY		--	--	--	--			
	OLD SQUAW		--	--	--	--			
	SCOTER		--	--	--	--			
	COMMON Merganser	2100	--	--	--	--		300	75
	RED BR. Merganser	350	50	--	--	--		50	12
	HOODED Merganser		--	--	--	--			
	TOTAL DUCKS	591430	18830	32660	17800	15200		84490	21120

DISTRICT: Lansing

MONTH: December F.Y. 74

	DAYS USE FOR PERIOD	Week ending: 12/8	12/15	12/22	12/29		MONTHLY TOTAL	AVERAGE
WATERFOWL POPULATIONS								
COOT	4200	500	100	--	--		600	150
SWAN	280	10	30	--	--		40	10
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	39200	5000	500	50	50		5600	1400
BLACK	1050	100	50	--	--		150	38
GADWALL								
WIDGEON								
PINTAIL	700	100	--	--	--		100	25
G.W. TEAL								
B.W. TEAL								
SHOVELER								
WOOD DUCK	700	100	--	--	--		100	25
REDHEAD	700	100	--	--	--		100	25
CANVASBACK	11200	1000	500	100	--		1600	400
RING-NECK	11200	1000	500	100	--		1600	400
SCAUP	11200	1000	500	100	--		1600	400
GOLDENEYE	5600	500	200	100	--		800	200
BUFFLEHEAD	1400	100	50	50	--		200	50
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER	1400	100	50	50	--		200,	50
RED BR. MERGANSER								
HOODED MERGANSER								
TOTAL DUCKS	84350	9100	2350	550	50		12050	3013

DISTRICT: Lansing

MONTH: January F.Y. 74

WATERFOWL POPULATIONS	DAY USE FOR PERIOD	Week ending: 1/5	1/12	1/19	1/26	2/2	MONTHLY TOTAL	AVERAGE
COOT	:	:	:	:	:	:	:	:
SWAN	:	:	:	:	:	:	:	:
CANADA GOOSE	:	:	:	:	:	:	:	:
WHITE FRONT	:	:	:	:	:	:	:	:
SNOW/BLUE	:	:	:	:	:	:	:	:
OTHER	:	:	:	:	:	:	:	:
TOTAL GEESE	:	:	:	:	:	:	:	:
MALLARD	700	20	20	20	20	20	20	20
BLACK	:	:	:	:	:	:	:	:
GADWALL	:	:	:	:	:	:	:	:
WIDGEON	:	:	:	:	:	:	:	:
PINTAIL	:	:	:	:	:	:	:	:
G.W. TEAL	:	:	:	:	:	:	:	:
B.W. TEAL	:	:	:	:	:	:	:	:
SHOVELER	:	:	:	:	:	:	:	:
WOOD DUCK	:	:	:	:	:	:	:	:
REDHEAD	:	:	:	:	:	:	:	:
CANVASBACK	:	:	:	:	:	:	:	:
RING-NECK	:	:	:	:	:	:	:	:
SCAUP	:	:	:	:	:	:	:	:
GOLDENEYE	:	:	:	:	:	:	:	:
BUFILEHEAD	:	:	:	:	:	:	:	:
RUDDY	:	:	:	:	:	:	:	:
OLD SQUAW	:	:	:	:	:	:	:	:
SCOTER	:	:	:	:	:	:	:	:
COMMON MERGANSER	:	:	:	:	:	:	:	:
RED BR. MERGANSER	:	:	:	:	:	:	:	:
HOODED MERGANSER	:	:	:	:	:	:	:	:
TOTAL DUCKS	700	20	20	20	20	20	100	20

DISTRICT: Lansing

MONTH: February

F.Y. 74

	DAYS USE FOR PERIOD	2/9	Week ending: 2/16	2/23	3/2	MONTHLY TOTAL	AVVERAGE
WATERFOWL POPULATIONS							
COOT							
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	1400	20	30	50	100	200	50
BLACK							
GADWALL							
WIDGEON							
PINTAIL							
G.W. TEAL							
B.W. TEAL							
SHOVELER							
WOOD DUCK							
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE	1400			50	150	200	50
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER	840			20	100	120	30
RED BR. MERGANSER							
HOODED MERGANSER							
TOTAL DUCKS	3640	20	30	120	350	520	130

DISTRICT: Lansing

MONTH: March

F.Y. 74

	WATERFOWL POPULATIONS	DAY'S USE FOR PERIOD ::	Week ending: 3/9	3/16	3/23	3/30		MONTHLY TOTAL	MONTHLY AVERAGE
COOT	56000	:: 1000	3000	1000	3000			8000	2000
SWAN	280	:: 10	10	--	20			40	10
CANADA GOOSE	1400	:: 50	100	50	--			200	50
WHITE FRONT									
SNOW/BLUE									
OTHER									
TOTAL GEESE	1400	:: 50	100	50	--			200	50
MALLARD	140000	:: 1000	10000	3000	6000			20000	5000
BLACK	7000	:: 200	500	100	200			1000	250
GADWALL	840		10	10	100			120	30
WIDGEON	14000	:: 100	500	500	900			2000	500
PINTAIL	5600	:: 100	500	100	100			800	200
G.W. TEAL	5600		100	100	600			800	200
B.W. TEAL	2800		100	100	200			400	100
SHOVELER	2800	:: 100	100	100	100			400	100
WOOD DUCK	14000	:: 200	500	300	1000			2000	500
REDHEAD	31500		2000	500	2000			4500	1125
CANVASBACK	140000		10000	2000	8000			20000	5000
RING-NECK	24500		1000	500	2000			3500	875
SCAUP	245000		10000	5000	15000			35000	8750
GOLDENEYE	56000	:: 2000	2000	2000	2000			8000	2000
BUFFLEHEAD	14000	:: 500	500	500	500			2000	500
RUDDY	700				100			100	25
OLD SQUAW									
SCOTER									
COMMON MEGANSER	28000	:: 1000	1000	1000	1000			4000	1000
RED BR. MEGANSER	700				100			100	25
HOODED MEGANSER	14000		500	500	500			2000	500
TOTAL DUCKS	747040	:: 10700	39310	16310	40400			106720	26680

DISTRICT: Lansing

MONTH: April F.Y. 74

	WATERFOWL POPULATIONS	DAY USE FOR PERIOD	Week ending: 4/6	4/13	4/20	4/27		MONTHLY TOTAL	
COOT	175000	5000	8000	9000	3000			25000	6250
SWAN	1050	30	20	100	--			150	38
CANADA GOOSE	7700	50	500	500	50			1100	275
WHITE FRONT									
SNOW/BLUE									
OTHER									
TOTAL GEESE	7700	50	500	500	50			1100	275
MALLARD	91000	5000	3000	4000	1000			13000	3250
BLACK	4550	300	200	100	50			650	162
GADWALL	560	50	30	--				80	20
WIDGEON	45500	2000	2000	2000	500			6500	1625
PINTAIL	18200	1000	1000	500	100			2600	650
G.W. TEAL	11200	1000	500	100	100			1700	425
B.W. TEAL	45500	500	1000	2000	3000			6500	1625
SHOVELER	36400	200	1000	3000	1000			5200	1300
WOOD DUCK	45500	1500	1500	1500	2000			6500	1625
REDHEAD	38500	1000	2000	2000	500			5500	1375
CANVASBACK	73500	4000	3000	3000	500			10500	2625
RING-NECK	77000	4000	3000	3000	1000			11000	2750
SCAUP	406000	13000	15000	20000	10000			58000	14500
GOLDENEYE	22400	100	2000	1000	100			3200	800
BUFFLEHEAD	18200	500	1000	1000	100			2600	650
RUDDY	5950	200	500	100	50			850	212
OLD SQUAW									
SCOTER									
COMMON MEGANSER	11900	1000	500	100	100			1700	425
RED BR. MEGANSER	5250	500	100	100	50			750	188
HOODED MEGANSER	25900	700	1000	1000	1000			3700	925
TOTAL DUCKS	983710	36550	38330	44500	21150			140530	35132

DISTRICT: Lansing

MONTH: May

F.Y. 74

	DAYS USE FOR PERIOD	5/4	5/11	5/18	5/25	6/1	MONTHLY TOTAL	AVERAGE
WATERFOWL POPULATIONS								
COOT	29400	2000	1000	500	500	200	4200	840
SWAN								
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	35000	1000	1000	1000	1000	1000	5000	1000
BLACK	630	50	10	10	10	10	90	18
GADWALL								
WIDGEON	1050	100	50	50	50	50	150	30
PINTAIL	1050	100	50	50	50	50	150	30
G.W. TEAL	1050	100	50	50	50	50	150	30
B.W. TEAL	31500	2000	1000	500	500	500	4500	900
SHOVELER	7000	500	400	100	100	100	1000	200
WOOD DUCK	84700	2500	2400	2400	2400	2400	12100	2420
REDHEAD	350	50	50	50	50	50	50	10
CANVASBACK	1050	100	50	50	50	50	150	30
RING-NECK	1050	100	50	50	50	50	150	30
SCAUP	81200	10000	1000	500	500	100	11600	2320
GOLDENEYE								
BUFFLEHEAD	700	100	50	50	50	50	100	20
RUDDY	350	50	50	50	50	50	50	10
OLD SQUAW								
SCOTER								
COMMON MEGANSER	350	50	50	50	50	50	50	10
RED BR. MEGANSER	4200	500	100	100	100	100	600	120
HOODED MEGANSER	17500	500	500	500	500	500	2500	500
TOTAL DUCKS	268730	17800	6660	5010	4510	4410	38390	7678

DISTRICT: Lansing

MONTH: June

F.Y. 74

	WATERFOWL	POPULATIONS	FOR PERIOD	USE	6/8	6/15	6/22	6/29	MONTHLY	TOTAL	AVERAGE
COOT	5600		200		200		200		200	800	200
SWAN											
CANADA GOOSE											
WHITE FRONT											
SNOW/BLUE											
OTHER											
TOTAL GEESE											
MALLARD	22400		800		800		800		800	3200	800
BLACK	280		10		10		10		10	40	10
GADWALL											
WIDGEON											
PINTAIL											
G.W. TEAL											
B.W. TEAL	14000		500		500		500		500	2000	500
SHOVELER											
WOOD DUCK	67200		2400		2400		2400		2400	9600	2400
REDHEAD											
CANVASBACK											
RING-NECK											
SCAUP											
GOLDENEYE											
BUFFLEHEAD											
Ruddy											
OLD SQUAW											
SCOTER											
COMMON Merganser											
RED BR. Merganser											
HOODED MERGANSER	11200		400		400		400		400	1600	400
TOTAL DUCKS	115080		4110		4110		4110		4110	16440	4110

NATIONAL WILDLIFE USE SYSTEM
PUBLIC USE REPORT

SING DISTRICT
3-3527-03-LND

ACTIVITY NAME JUL-73 AUG-73 SEP-73 OCT-73 NOV-73 DEC-73 JAN-74 FEB-74 MAR-74 APR-74 MAY-74 JUN-74

12 MONTH
TOTAL

NO. VISITS TO REFUGE

39000	29000	23000	28000	13000	9700	5600	3300	3200	6500	23000	23000	206300
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VISITS BY MONTH

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

MANSING DISTRICT
03-3527-03-LND

ACT HRS BY MONTH

	ACTIVITY NAME	JUL-73	AUG-73	SEP-73	OCT-73	NOV-73	DEC-73	JAN-74	FEB-74	MAR-74	APR-74	MAY-74	JUN-74	12 MONTH TOTAL
INTERPRETATION	OTHER PROGRAMS	90												950
RECREATION-WILDLIFE WILDLANDS	HUNTING MIGRATORY BIRDS													
	DUCKS	47500	7500											55000
	GESE	500	150											650
	GENERAL WATERFOWL	500	50											550
	HUNTING RESIDENT GAME													
	UPLAND GAME BIRDS													
	BIG GAME, DEER-GUN													
	WHITE-TAILED DEER													
	BIG GAME, DEER-BOW													
	WHITE-TAILED DEER													
	SMALL GAME													
	FISHING													
	WARMWATER													
	CLAMS, CRABS, OYSTERS													
	WILDLIFE OBSERVATION													
	FOOT	1056	400	200	20									
	AUTO	4000	3000	1600	1000	400	120	80	100	100	400	1000	4000	3916
	BOAT (NONMOTORIZED)	2000	1000	200	100	100						400	2000	5800
	WILDLANDS APPRECIATION													
	FOOT	100	100	200	10800	6000	2400	1200	600	600	600	100	100	22300
	AUTO	800	800	1000	400	200	25	50	50	200	200	800	800	5125
	BOAT	800	800	400	600	200	10	10	10	10	10	800	800	4400
	PHOTOGRAPHY	200	200	100								200	200	1145
RECREATION NON-WILDLIFE	CAMPING	72000	48000	36000	24000	12000						3600	24000	208000
	PICNICING	7500	4500	1500	900	150						900	6000	21450
	SWIMMING	24000	15000	6000								1200	15000	61200
	EDATING	32000	20000	8000	4000	400						8000	28000	100400
	WATER SKIING	12000	6000	1500								600	6000	26100
TOTAL INTERPRETATION														950
TOTAL HUNTING		100200	80200	64000	60000	32020	32000	20800	12000	12000	24000	80200	56200	60110
TOTAL FISHING		8956	6300	3700	2600	11810	6190	2550	1440	840	1500	3700	8900	573620
TOTAL OTHER W/W RECREATION														58486
TOTAL WILDLIFE ORIENTED		109156	86500	67790	112000	53900	38830	23350	13440	13700	25500	83900	65100	693166
TOTAL NON-WILDLIFE ORIENTED		147500	93500	53000	28900	1750						14300	79000	417950
TOTAL PUBLIC USE		256656	180000	120790	140900	55650	38830	23350	13440	13700	25500	98200	144100	1111116

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

ACT HRS BY MONTH

LANSING DISTRICT
03-3527-03-LND

ACTIVITY NAME	12 MONTH												
	JUL-73	AUG-73	SEPP-73	OCT-73	NOV-73	DEC-73	JAN-74	FEB-74	MAR-74	APR-74	MAY-74	JUN-74	TOTAL
NO. VISITS TO REFUGE	39000	29000	23000	28000	13000	9700	5600	3300	3200	6500	23000	23000	206300

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

ING DISTRICT
-3527-03-LND

VISITS BY MONTH

ACTIVITY NAME

JUL-73 AUG-73 SEP-73 OCT-73 NOV-73 DEC-73 JAN-73 FEB-74 MAR-74 APR-74 MAY-74 JUN-74 12 MONTH TOTAL

NO. VISITS TO REFUGEE